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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,306	12/31/2001	Simon M. Furnish	InFraReDx-12	4514
26161 7590 08/27/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER SMITH, RUTH S	
			ART UNIT 3737	PAPER NUMBER
			MAIL DATE 08/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/037,306

Applicant(s)

FURNISH, SIMON M.

Examiner

Ruth S. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-38 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 13, 16, 20, 22-30, 39-43 and 45-50 is/are rejected.
- 7) ☒ Claim(s) 2, 4-12, 14, 15, 17-19, 21, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### ***Specification***

The disclosure is objected to because of the following informalities: In the amendment to the specification, filed 4/23/04, applicant cited the wrong serial number for the co-pending application. It appears that "10/037306" should be "10/037307". On page 22, line 5, "fiber 32" should be "fiber 44". On page 29, line 11 incorrectly refers to support strut 200. On page 31, line 6, "9a" should be "T9a". Appropriate correction is required.

### ***Drawings***

The drawings are objected to because Figure 1 fails to show reference numeral 12 as indicated on page 21 of the specification. In figure 1, box 15 should be labeled as to the element that it represents. Reference numerals alone are insufficient. In figure 5b, the lead line from reference numeral 120 is incorrectly directed toward element 128 (end cap). In figures 6a-d, reference numeral 166 is not shown as disclosed on page 27 of the specification. Figures 6a-d fail to shown reference numeral 170 as disclosed. Reference numerals 194,196 are not seen in figure 7 as disclosed. Beam L9 is not seen as disclosed.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the controlled analytical-light generating source and light collection analysis device must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 51 been renumbered claim 50.

Claims 5-12,41-43,45-48 are objected to because of the following informalities: In claim 5, it is unclear as to whether the catheter sheath referred to on line 2 is the same catheter sheath on which the housing is supported as set forth in claim 1. In claim 6, it is unclear as to whether the reflective surface is a different reflective surface than the ones set forth in claim 1. In claim 9, it is unclear as to whether the catheter sheath referred to on line 6 is the same catheter sheath on which the housing is supported as set forth in claim 1 and it is unclear as to whether the reflective surface is a different reflective surface than the ones set forth in claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 41-43,45-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 41 is vague and indefinite in that it attempts to define the angle of the redirectors in term of unclaimed structure, such as the optical fibers.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,3,13,20,23-25,39-40,49,50 are rejected under 35 U.S.C. 102(e) as being anticipated by Zuluaga et al (US 2002/0183622).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The claims are directly readable on Zuluaga et al, particularly as seen in figures 10-12. Zuluaga et al disclose a catheter tip apparatus having an elongated rotatable housing, a collection fiber 146, a delivery fiber 136, a light source 130, a light analysis device 50, reflective surfaces 132,134,142,144. The reflective surfaces can comprise a mirror. The reflective surfaces are considered to be integral with the housing.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16,22,26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zuluaga et al. Zuluaga et al disclose a catheter tip apparatus having an elongated rotatable housing, a collection fiber 146, a delivery fiber 136, a light source 130, a light analysis device 50, reflective surfaces 132,134,142,144. The reflective surfaces can comprise a mirror. The reflective surfaces are considered to be integral with the

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housing. With respect to claim 22, the specific type of reflective surface used would have been an obvious design choice of known functional equivalents in the art. With respect to claims 16,27,30, in the absence of any showing of criticality, the manner in which the device is constructed would have been an obvious design choice of known equivalents in the art. With respect to claim 26, the use of an index matching material is an old and well known expedient in the optical art and would therefore have been obvious to one skilled in the art.

### ***Allowable Subject Matter***

Claims 33-38 are allowable over the prior art of record.

Claims 2,4,14,15,17-19,21,31,32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

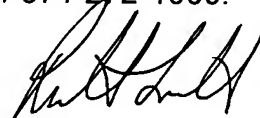
Applicant's arguments with respect to claims 1,3,13,16,20,23-30,39-43,45-48 have been considered but are moot in view of the new ground(s) of rejection. It should be noted that while the examiner has withdrawn the previous prior art rejections set forth, applicant arguments regarding mirror 58 in the Boppart reference is not understood. Reference 58 appears to be directed to an optical fiber alone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ruth S. Smith  
Primary Examiner  
Art Unit 3737

RSS